## REMARKS

The Office Action dated September 9, 2003 and the Advisory Action dated January 9, 2004, have been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. No new matter has been added. Claims 2-23 are pending in the above-cited application and are again submitted for consideration.

In the Advisory Action, the Office objected to amendments to the specification and the drawings were made in response to the Office's objection to the drawings made in the September 9, 2003 Office Action. The Advisory Action indicated that the use of "controller" constituted new matter and that the amendments would not be entered. Applicants respectfully traverse this finding, according to the remarks below.

The recitation of "controller", illustrated in Fig. 4 and provided in the amendments to the specification is fully supported by the specification of the instant application, including the originally filed claims, and the provisional application, 60/103,688, upon which the instant application claims priority from under 35 U.S.C. §119(e). The provisional application provides support for the "controller" on page 2 of the section labeled Power Management Unit, and the power management logic control table, on page 3. Support may also be found in the specification of the non-provisional application at page 5, lines 3-5: "the method for activating and deactivating digital subcircuits and analog subcircuits are different and therefore different types of control signals and methods are provided," and at page 3, lines 17 & 18: "providing each defined subcircuit with its own power supply and means of activation and deactivation."

Based on the support for "controller" discussed above, Applicants respectfully assert that no new matter has been entered through the amendments to the drawings and specification. As discussed at M.P.E.P. 2163.07, the mere rephrasing of a passage does not constitute new matter. Applicants respectfully assert that the use of the term "controller" is fully supported and should not be objected to as new matter. Reconsideration and withdrawal of the objections to the drawings and specification are respectfully requested.

Claims 2-4 and 21 were rejected under 35 U.S.C. §102(b) as being anticipated by *Crayford* (U.S. Patent No. 5,404,544). Claims 5-20 and 22-23 were again rejected under 35 U.S.C. §103(a) as being obvious over *Crayford* in view of *Wakeley et al.* (U.S. Patent No. 6,198,727). The above rejections, as might be applied against the present claims, are respectfully traversed based on the remarks that follow.

The present invention, as recited in claim 2, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver, and a receiver subcircuit. The transmitter subcircuit and the receiver subcircuit each have their own power supply and means for activation and deactivation and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver.

The present invention, as recited in claim 10, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to an industry-standard pulse for indicating a live transceiver, and a receiver subcircuit having a media independent interface for receiving data, the receiver subcircuit remains power-on during powered-down mode. The transmitter and receiver subcircuits each have its own power supply and means for activation and deactivation and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver.

The present invention, as recited in claim 17, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit transmitting a minimally powered link pulse during powered-down mode to indicate a live transceiver circuit, the pulse does not conform to industry-standard pulse for indicating a live transceiver, and a receiver subcircuit having a media independent interface for receiving data, where the receiver subcircuit remains power-on during powered-down mode and upon receiving signal activity activates the transceiver into power-on mode. The transmitter and receiver subcircuits each have its own power supply and means for activation and deactivation and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver.

The present invention, as recited in claim 21, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes transmitter subcircuit means for transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver, and receiver subcircuit means for receiving data. The transmitter subcircuit means and the receiver subcircuit means each have its own power supply and means for activation and deactivation and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver.

The present invention, as recited in claim 22, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes transmitter subcircuit means for transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to an industry-standard pulse for indicating a live transceiver and receiver subcircuit means for having a media independent interface for receiving data, the receiver subcircuit remains power-on during powered-down mode. The transmitter subcircuit means and the receiver subcircuit means each have its own power supply and means for activation and deactivation and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver.

The present invention, as recited in claim 23, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit means for transmitting a minimally powered link pulse

during powered-down mode to indicate a live transceiver circuit, the pulse does not conform to industry-standard pulse for indicating a live transceiver, and a receiver subcircuit means having a media independent interface for receiving data, the receiver subcircuit remains power-on during powered-down mode and upon receiving signal activity activates the transceiver into power-on mode. The transmitter subcircuit means and the receiver subcircuit means each have its own power supply and means for activation and deactivation and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver.

The present invention is directed to transceiver and transceiver circuits having separate subcircuits, where each subcircuit has its own power supply and means of activation and deactivation. The invention allows for portions of the transceiver to be powered-down and to minimize energy usage during an idle period. Applicants respectfully submit that each of claims 2-23 recite subject matter which is neither disclosed nor suggested in the cited prior art.

*Crayford* is directed to a network connection system that allows for the power consumption of an Ethernet connection to be managed by the operating software/hardware. When in the "link good" condition, a 10BASE-T transceiver is required to output a link status (LNKST) signal to this effect. The Media Access Controller (MAC) 30, with an embedded 10BASE-T transceiver (37), uses the LNKST signal to provide power management to the MAC (30). By using the programmable AWAKE bit, the receive section of the 10BASE-T transceiver (37) can remain powered,

even if the SLEEP input to the MAC (30) is activated. This allows the transceiver (37) to detect a link beat pulse (60) or receive packet activity. While both the current invention and *Crayford* are concerned with power management of a connection, how they each accomplish this management is quite different.

Claim 2 recites, in part, that "and when the transmitter subcircuit is in a power-on mode, the transmitter subcircuit transmits the industry-standard pulse for indicating the live transceiver." Similar limitations can be found in independent claims 10, 17 and 21-23. The Office has previously asserted that *Crayford* discloses transmitting a pulse that conforms with the industry-standard 10Base-T. The Office has taken a position that such a pulse is equivalent to the non-industry-standard pulse recited in the independent claims. However, *Crayford* fails to teach any *other* type of pulses that may be used to indicate a live transceiver. The only pulse discussed in *Crayford* is the link beat pulse 60 that is produced by the 10BASE-T transceiver to establish a link in the network is in place. Thus, even if the Office's position was accepted, i.e. that the 10Base-T pulse is the non-industry-standard pulse, then *Crayford* fails to teach or suggest the industry-standard pulse.

Similarly, Applicants respectfully assert that there is no teaching or suggestion in *Crayford* to modify that reference to reach the claims of the instant invention. As discussed above, while *Crayford* and the instant invention may have similar objectives, i.e. power management, they provide that management differently. To suggest that it would have been obvious to modify *Crayford* to have a transmitter subcircuit transmit a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse

does not conform to industry-standard pulse for indicating a live transceiver in that mode and a different type of pulse in power-on mode, would change the operation of the system described in *Crayford*. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). As such, Applicants respectfully assert that such a modification of *Crayford* to reach the claims of the instant application would be improper and that the claims are not rendered obvious over *Crayford* alone.

With respect to the rejection of claims 5-20, 22 and 23, *Wakeley et al.* is also cited to cure the deficiencies of *Crayford*, namely an industry-standard pulse, a transceiver with an auto-negotiation mode and a receiver having a media independent interface. Even if it were accepted that *Wakeley et al.* teaches the above recited deficiencies of *Crayford*, *Wakeley et al.* would still not teach the use of a transmitter subcircuit transmit a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver. As such, Applicants respectfully assert that the rejection of claims 5-20, 22 and 23 is improper and should be withdrawn.

Claims 2-23 are pending. Claims 3-9 depend from independent claim 2, claims 11-16 depend from independent claim 10 and claims 18-20 depend from claim 17. The Applicant respectfully submits that claims 3-9, 11-16 and 18-20 are additionally allowable for their dependency from allowable base claims, as well as for the additional

subject matter recited therein. As such, the Applicants respectfully request allowance of claims 2-23 and the prompt issuance of a Notice of Allowability.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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